DERWENT-ACC-NO: 2000-629618

DERWENT-WEEK: 200942

TITLE: Polyamide composition useful in injection welding material, comprises a polyamide resin and a polyhydric alcohol

INVENTOR: AKAGAWA Y; HARADA H ; MORIMOTO O ; OGAWA T

PATENT-ASSIGNEE: UBE IND LTD[UBEI]

PRIORITY-DATA: 2000JP-029871 (February 8, 2000) , 1999JP-089812 (March 30, 1999)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE
EP 1041109 A2	October 4, 2000	EN
JP 2000345031 A	December 12, 2000	JA
JP 2008274305 A	November 13, 2008	JA
JP 4284808 B2	June 24, 2009	JA

DESIGNATED-STATES: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
EP 1041109A2	N/A	2000EP-106719	March 29, 2000
JP2000345031A	N/A	2000JP-029871	February 8, 2000
JP 4284808B2	N/A	2000JP-029871	February 8, 2000
JP2008274305A	Previous Publ	2008JP-213477	August 22, 2008

INT-CL-CURRENT:

TYPE	IPC	DATE
CIPP	C08L77/00	20060101
CIPP	C08L77/00	20060101

CIPS B29C45/14 20060101
CIPS B29C65/70 20060101
CIPS C08K3/00 20060101
CIPS C08K5/053 20060101
CIPS C08K5/053 20060101
CIPS C08K5/098 20060101
CIPS C08K7/04 20060101
CIPS C08K7/04 20060101

ABSTRACTED-PUB-NO: EP 1041109 A2

BASIC-ABSTRACT:

NOVELTY - A polyamide composition comprises (parts by weight (pbw)), a polyamide resin (1) (100), and a polyhydric alcohol (2) (0.005 - 5) having a melting point of 150 - 280degreesC.

USE - In injection welding material (claimed) by die slide injection (DSI) or die rotatory injection (DRI) technique e.g. automotive parts manufactured by DSI or DRI, house-hold electric appliance and connectors for electronic apparatuses, mechanism elements such as intake manifold, air duct, resonator chamber, oil strainer, power steering tank, brake fluid subtank, relay box, ecofiller, locker cover and sensor and modular components.

ADVANTAGE - The composition does not require a pre-treatment step for addition of a fluidity improver, prevents scattering of the fluidity improver and has both good fluidity and mechanical strength without impairing mechanical properties, heat resistance, dimensional accuracy, resistance against an oil such as gasoline or engine oil, and chemical resistance inherent to a polyamide resin. The improver adheres to the external surfaces of the pellets, and without causing clogging of the filter of the hopper drier of the injection molding machine.

EQUIVALENT-ABSTRACTS:

POLYMERS

Preferred Components: (1) has a melting point of 160 - 320degreesC. (2) is
pentaerythritol and/or dipentaerythritol.

Preferred Composition: (2) is in an amount of (0.05 - 3 pbw) based on 100 pbw
of (1). The composition further comprises a fibrous filler (preferably glass
fiber) and a color pigment. The fibrous filler is in an amount of not more
than 200 (preferably not more than 100, especially 5 - 50)pbw based on 100 pbw
of (1).

A target polyamide composition was prepared by kneading (parts by weight (pbw))
UBE Nylon 6 1015B (RTM: polyamide 6 resin) (100), black pigment master (3),
pentaerythritol (100) with a melting point of 260degreesC as a polyhydric
alcohol, and glass fibers (45). The resulting composition showed a fluidity
(mm) for 50 MPa (75) and for 100 MPa (135) and injection welding strength (kg)
(390). The polyamide resin thus obtained permitted continuous molding without
causing clogging of the filter of the hopper drier of the injection molding
machine.

TITLE-TERMS: POLYAMIDE COMPOSITION USEFUL INJECTION WELD MATERIAL COMPRISE
RESIN ALCOHOL

DERWENT-CLASS: A23

CPI-CODES: A05-F01E; A08-M06; A11-B12;

ENHANCED-POLYMER-INDEXING:
Polymer Index [1.1]
018 ; P0635*R F70 D01; S9999 S1434;
Polymer Index [1.2]
018 ; P0646 P1934 P0635 F70 D01 D11 D10 D50 D86; S9999 S1434;
Polymer Index [1.3]
018 ; ND01; ND04; K9892; K9449; Q9999 Q7874; B9999 B5312 B5298
B5276; B9999 B4171 B4091 B3838 B3747; B9999 B3554*R; Q9999 Q9234

Q9212; Q9999 Q9289 Q9212; Q9999 Q7330*R; Q9999 Q7681*R; B9999 B4682
B4568; B9999 B4671 B4568; B9999 B4580 B4568; N9999 N6484*R N6440;
B9999 B3758*R B3747;
Polymer Index [1.4]
018 ; G2891 D00 Si 4A; A999 A237; A999 A419; S9999 S1070*R;
Polymer Index [1.5]
018 ; D01 F28 F26 F29 D11 D10 D50 D90 F34; G1070 G0997 D01 D11 D10 D50
D85 F29 F26 R00972 6660; A999 A691*R; A999 A771;
Polymer Index [1.6]
018 ; A999 A102 A077;

SECONDARY-ACC-NO:
CPI Secondary Accession Numbers: 2000-188790